DOCUMENT RESUME

ED 345 071 CE 061 165

TITLE	Building and Property Maintenance. Ohio's Competency Analysis Profile.
INSTITUTION	Ohio State Univ., Columbus. Vocational Instructional Materials Lab.
SPONS AGENCY	Ohio State Dept. of Education, Columbus. Div. of Vocational and Career Education.
PUB DATE	Apr 92
NOTE	32p.; For related documents, see ED 338 827-852 and CE 061 142-176.
AVAILABLE FROM	Vocational Instructional Materials Lab, Ohio State University, 1900 Kenny Road, Columbus, OH 43210-1090 ($1.50).
PUB TYPE	Guides - Classroom Use - Teaching Guides (For Teacher) (052)
EDRS PRICE	MF01/PC02 Plus Postage.
DESCRIPTORS	Air Conditioning; *Buildings; Building Trades; Carpentry; Competence; *Competency Based Education; Electricians; Employment Potential; Entry Workers; Heating; Job Analysis; Job Skills; *Maintenance; Masonry; Occupational Information; Painting (Industrial Arts); Plumbing; Postsecondary Education; Refrigeration Mechanics; Roofing; Secondary Education; Task Analysis; Ventilation; Welding
IDENTIFIERS	DACUM Process; Ohio

ABSTRACT

Developed through a modified DACUM (Developing a Curriculum) process involving business, industry, labor, and community agency representatives in Ohio, this document is a comprehensive and verified employer competency profile for building and property maintenance occupations. The list contains units (with and without subunits), competencies, and competency builders that identify the skills needed to enter these occupations. The occupational, academic, and employability skills for this occupation or occupational area are included. Within the outline are three levels of items: core, advancing, and futuring. Core items identify the knowledge, skills, and attitudes essential for entry-level employment. These items are required to be taught and will be the basis for questions on the state vocational competency tests. Advancing items identify the knowledge, skills, and attitudes needed to advance in the occupation; futuring items identify the knowledge, skills, and attitudes needed to enter and remain in a given occupation 3 to 4 years from now. Titles of the 11 units are as follows: basic procedures; carpentry applications and repairs; roofing applications and repairs; ceramic tile; masonry applications and repairs; electrical installations and repairs; plumbing installations and repairs; welding and cutting operations; heating, ventilation, air conditioning, and refrigeration installations and service; painting and wallpapering; and employability skills. (YLB)

ED345674

OCAP

OHIO'S COMPETENCY ANALYSIS PROFILE

BUILDING AND PROPERTY MAINTENANCE

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

This document has been reproduced as received from the person or organization originating it.

Minor changes have been made to improve reproduction quality.

Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

PERMISSION TO REPRODUCE MATERIAL HAS BEEN GRANTE

TO THE EDUCATIONAL RESOU INFORMATION CENTER (ERIC)

Employer Verification Panel

Jerry Barber, *Shelby Memorial Hospital*, Shelby, Ohio

Richard Bycroft, *Columbiana Career Center*, Lisbon, Ohio

James Foreman, *Plaza Properties, Inc.*, Columbus, Ohio

Dan Glass, *Glass Art Masonry and Maintenance*, Marion, Ohio

Dave Perry, *Wallick Properties*, Columbus, Ohio

Bobby Sparks, *Grafton Correctional Institution*, Grafton, Ohio

James Warner, *Combined Health Districts of Montgomery County*, Dayton, Ohio

Division of Vocational and Career Education
Ohio Department of Education

Vocational Instructional Materials Laboratory
Center on Education and Training for Employment
THE OHIO STATE UNIVERSITY

BEST COPY AVAILABLE

What is OCAP?

"A comprehensive and verified employer competency list will be developed and kept current for each program." This is the second objective of Imperative 3 of the *Action Plan for Accelerating the Modernization of Vocational Education: Ohio's Future at Work*. Ohio's Competency Analysis Profile (OCAP) lists are the Division of Vocational and Career Education's response to that objective. OCAP lists evolve from a modified DACUM process involving business, industry, labor, and community agency representatives from throughout Ohio. The OCAP process is directed by the Vocational Instructional Materials Laboratory at The Ohio State University's Center on Education and Training for Employment.

How is OCAP used?

Each OCAP contains units (with and without subunits), competencies, and competency builders that identify the occupational, academic,* and employability skills needed to enter a given occupation or occupational area. Within that outline there are three levels of items: core, advancing, and futuring. Core items identify the knowledge, skills, and attitudes essential for entry-level employment. These items will be the basis for questions on the state vocational competency tests (scheduled to begin in school year 1993-94). Advancing items (marked with one asterisk) identify the knowledge, skills, and attitudes needed to advance in a given occupation. Futuring items (marked with two asterisks) identify the knowledge, skills, and attitudes needed to enter and remain in a given occupation three to four years from now.

School districts may add as many units, subunits, competencies, and/or competency builders as desired to reflect local employment needs, trends, and specialties. Local advisory committees should be actively involved in the identification and verification of additional items. Using OCAP lists, instructors will be able to formulate their vocational courses of study and monitor competency gains via the new criterion-referenced competency testing program that will be directly tied to the competencies identified on the OCAP lists.

***Academic competencies have not been identified for all OCAPs. At a later date math, communication, and science competencies will be released.**

The **Employability Skills** portion of this list was verified by the following employer panel:

Gary J. Corrigan, *Dana Corporation*, Ottawa Lake, Michigan
David Crooks, *Bowling Green State University Union Food Service*, Bowling Green, Ohio
Pat Doerman, *Farrow's Harley-Davidson*, Columbus, Ohio
William Gockenbach, *Kaiser Aluminum*, Heath, Ohio
Patsy Hathaway, *CBS Personnel Services, Inc.*, Dayton, Ohio
Marlyn Harman, *Marlyn Harman & Associates*, Cleveland, Ohio
Thomas R. Hyldahl, *Toledo Edison*, Toledo, Ohio
Carol C. James, *Ohio Contractors Association*, Columbus, Ohio
James Mack, *Chrysler Jeep Assembly*, Toledo, Ohio
Rocky McCoy, *Ironton-Lawrence Co. Community Action Organization*, Ironton, Ohio
James Needs, *Independent Crop Producer*, Upper Sandusky, Ohio
Ronald Simmons, *Former GM Executive*, Warren Ohio

Ohio Competency Analysis Profile
Building and Property Maintenance

Unit 1: Basic Procedures

Competency 1.0.1: Use personal safety equipment according to Occupational Safety and Health Administration (OSHA) standards

Competency Builders:

1.0.1.1 View graphic audiovisual materials regarding safety
1.0.1.2 Wear side-shield safety glasses
1.0.1.3 Wear ear protection
1.0.1.4 Wear approved footwear
1.0.1.5 Wear hard hat
1.0.1.6 Wear appropriate dust mask
1.0.1.7 Wear appropriate clothing
1.0.1.8 Secure long hair

Competency 1.0.2: Use safety and fire equipment according to manufacturer's specifications

Competency Builders:

1.0.2.1 Check power sources for potential hazards
1.0.2.2 Locate and use fire extinguishers
1.0.2.3 Demonstrate basic first-aid techniques
1.0.2.4 *Use power-kill switches
1.0.2.5 Check all safety apparatus and equipment
1.0.2.6 Use safety apparatus and equipment
1.0.2.7 Conduct routine safety inspections
1.0.2.8 Demonstrate lockout procedures

Competency 1.0.3: Identify, handle, use, and dispose of hazardous materials

Competency Builders:

1.0.3.1 Read material safety data sheet (MSDS) for each hazardous material
1.0.3.2 Follow procedures specified on MSDS regarding substance handling and safety apparatus required
1.0.3.3 Dispose of hazardous materials according to Environmental Protection Agency (EPA) specifications

Competency 1.0.4: Use, handle, and store tools, materials, and equipment according to manufacturer's specifications and OSHA standards

Competency Builders:

1.0.4.1 Identify potential hazards of hand tools
1.0.4.2 Demonstrate safe use of hand tools
1.0.4.3 Demonstrate safe handling and lifting methods
1.0.4.4 Identify potential hazards of power tools and equipment
1.0.4.5 Operate power tools
1.0.4.6 Operate power equipment
1.0.4.7 Maintain and check all hand tools
1.0.4.8 Maintain and check all power equipment
1.0.4.9 Demonstrate pride in use and care of equipment and supplies

Competency 1.0.5: Troubleshoot maintenance problems according to established procedures

Competency Builders:

1.0.5.1 Obtain all available information about problem
1.0.5.2 Document problem
1.0.5.3 Perform multisensory inspection
1.0.5.4 Perform operational checks
1.0.5.5 Refer to specifications manuals
1.0.5.6 Review maintenance records
1.0.5.7 Identify specific problems

Competency 1.0.6: Perform preventive maintenance according to manufacturer's specifications and/or outside authorities with jurisdiction (e.g., building inspectors, zoning inspectors)

Competency Builders:

1.0.6.1 Create maintenance records
1.0.6.2 Review past maintenance records
1.0.6.3 Follow preventive maintenance schedule
1.0.6.4 Refer to preventive maintenance manuals
1.0.6.5 Log preventive maintenance performed

Unit 2: Carpentry Applications and Repairs

Competency 2.0.1: Use instruments and tools for layout work

Competency Builders:

2.0.1.1 Use measuring tape
2.0.1.2 Read measuring tape
2.0.1.3 Use framing square
2.0.1.4 Use level
2.0.1.5 Use plumb bob
2.0.1.6 Use chalk box
2.0.1.7 Use combination square

* Advancing
** Futuring

Competency 2.0.2: Waterproof foundations according to local codes

Competency Builders:

2.0.2.1 Clean walls
2.0.2.2 Fill holes with proper material
2.0.2.3 Apply material

Competency 2.0.3: Construct forms for slabs and paving according to local codes

Competency Builders:

2.0.3.1 Determine job requirements
2.0.3.2 Calculate paving materials needed
2.0.3.3 Level base material
2.0.3.4 Lay out and erect forms
2.0.3.5 Brace forms
2.0.3.6 Install reinforcing material
2.0.3.7 Remove forms

Competency 2.0.4: Construct and install sills and sill sealer according to manufacturer's specifications

Competency Builders:

2.0.4.1 Determine job requirements
2.0.4.2 Select materials
2.0.4.3 Clean top of wall
2.0.4.4 Cut sealer to lengths
2.0.4.5 Cut sill
2.0.4.6 Fasten sill in place

Competency 2.0.5: Erect girders, beams, and columns*

Competency Builders:

2.0.5.1 Install columns*
2.0.5.2 Install temporary braces*
2.0.5.3 Install girders or beams*

Competency 2.0.6: Sister and replace floor joists according to applicable codes or to match existing construction

Competency Builders:

2.0.6.1 Determine job requirements
2.0.6.2 Lay out floor joist
2.0.6.3 Cut floor joist
2.0.6.4 Install joist headers and trimmers

* Advancing
** Futuring

Competency 2.0.7: Install and/or replace bridging according to local codes

Competency Builders:

2.0.7.1 Determine job requirements
2.0.7.2 Cut bridging
2.0.7.3 Install X-bridging

Competency 2.0.8: Lay out walls and rough openings according to blueprint specifications

Competency Builders:

2.0.8.1 Determine job requirements
2.0.8.2 Prepare subfloor
2.0.8.3 Strike wall lines
2.0.8.4 Locate and mark rough openings

Competency 2.0.9: Remove and replace roof sheathing to match original specifications

Competency Builders:

2.0.9.1 Lay out sheathing
2.0.9.2 Cut sheathing
2.0.9.3 Install sheathing
2.0.9.4 Lay out and install saddles and crickets*

Competency 2.0.10: Install doors, windows, and hardware according to manufacturer's specifications and local codes

Competency Builders:

2.0.10.1 Determine job requirements
2.0.10.2 Measure for door unit
2.0.10.3 Obtain door unit
2.0.10.4 Replace thresholds
2.0.10.5 Install door unit and hardware
2.0.10.6 Verify door schedule
2.0.10.7 Install frame
2.0.10.8 Fit and hang door
2.0.10.9 Install stop and casing
2.0.10.10 Install lock set
2.0.10.11 Cut and install stool
2.0.10.12 Install side casing
2.0.10.13 Install head casing
2.0.10.14 Install apron
2.0.10.15 Repair doors and trims
2.0.10.16 Measure for window unit
2.0.10.17 Obtain window unit
2.0.10.18 Install window unit and hardware
2.0.10.19 Repair windows and trim
2.0.10.20 Install weather stripping

Competency 2.0.11: Replace or repair fascia, soffits, frieze board, and moldings to match original construction

Competency Builders:

2.0.11.1 Match fascia
2.0.11.2 Install fascia
2.0.11.3 Match soffit materials
2.0.11.4 Install soffits
2.0.11.5 Match moldings and frieze board
2.0.11.6 Cut and install moldings and frieze board

Competency 2.0.12: Repair exterior wall to match existing surface

Competency Builders:

2.0.12.1 Assemble materials for wall finish
2.0.12.2 Lay out and install wall material
2.0.12.3 Replace damaged or worn sections of wooden lap siding or side shingles
2.0.12.4 Replace damaged sections of aluminum/vinyl/steel siding

Competency 2.0.13: Replace gutters and downspouts according to manufacturer's specifications and local codes

Competency Builders:

2.0.13.1 Lay out gutters
2.0.13.2 Cut and install gutters
2.0.13.3 Cut and install downspouts

Competency 2.0.14: Ventilate attic and crawl spaces*

Competency Builders:

2.0.14.1 Determine job requirements*
2.0.14.2 Select materials*
2.0.14.3 Install vents*

Competency 2.0.15: Install thermal insulation and vapor barriers*

Competency Builders:

2.0.15.1 Determine job requirements*
2.0.15.2 Select materials and fasteners*
2.0.15.3 Install outer vapor barrier*
2.0.15.4 Install insulation according to Occupational Safety and Health Administration (OSHA) standards*
2.0.15.5 Install inner vapor barrier*

Competency 2.0.16: Superinsulate structures*

Competency Builders:

2.0.16.1 Determine job requirements*
2.0.16.2 Select materials and fasteners*
2.0.16.3 Install batts in walls*
2.0.16.4 Install two layers of R-30 insulation in ceiling*
2.0.16.5 Install vapor barrier*
2.0.16.6 Install plastic foam boards or sheets*
2.0.16.7 Blow in insulation*

Competency 2.0.17: Hang and finish drywall on wood framing or metal studs according to local codes

Competency Builders:

2.0.17.1 Determine job requirements
2.0.17.2 Determine installation method
2.0.17.3 Determine type of fastener and drywall compound
2.0.17.4 Measure and cut drywall panels
2.0.17.5 Fasten drywall panels
2.0.17.6 Seal joints and fill depressions
2.0.17.7 Sand, coat, and finish drywall
2.0.17.8 Patch and refinish drywall surfaces

Competency 2.0.18: Install wall paneling according to manufacturer's specifications

Competency Builders:

2.0.18.1 Determine job requirements
2.0.18.2 Determine installation method
2.0.18.3 Measure and cut paneling
2.0.18.4 Fasten paneling to wall
2.0.18.5 Install finish moldings
2.0.18.6 Fill nail holes

Competency 2.0.19: Install suspended ceilings according to manufacturer's specifications

Competency Builders:

2.0.19.1 Determine job requirements
2.0.19.2 Select materials
2.0.19.3 Lay out ceiling line
2.0.19.4 Install edge moldings
2.0.19.5 Hang wires
2.0.19.6 Cut and install grid system
2.0.19.7 Install ceiling panels
2.0.19.8 Repair suspended ceilings

Competency 2.0.20: Install finish flooring according to manufacturer's specifications

Competency Builders:

2.0.20.1 Determine job requirements
2.0.20.2 Determine installation method
2.0.20.3 Cut and install underlayment
2.0.20.4 Lay out centerline
2.0.20.5 Spread adhesive material
2.0.20.6 Install floor tile
2.0.20.7 Install kick strips
2.0.20.8 Determine requirements for wood flooring
2.0.20.9 Prepare subfloor
2.0.20.10 Install building paper over subfloor
2.0.20.11 Repair flooring and subflooring

Competency 2.0.21: Install baseboard and moldings to match existing installation

Competency Builders:

2.0.21.1 Determine job requirements
2.0.21.2 Cut and install baseboard and shoe mold
2.0.21.3 Cut and install crown mold
2.0.21.4 Cut and install chair rail

Competency 2.0.22: Install cabinets according to project specifications

Competency Builders:

2.0.22.1 Determine job requirements
2.0.22.2 Verify cabinets received with requirements
2.0.22.3 Determine electrical and plumbing clearances
2.0.22.4 Check squareness and plumb of walls
2.0.22.5 Check level of floor
2.0.22.6 Set base unit cabinets in location
2.0.22.7 Fasten base cabinet sections together
2.0.22.8 Attach cabinets to walls
2.0.22.9 Locate and mark studs for wall units
2.0.22.10 Mark and drill backrail to match stud location
2.0.22.11 Fasten sections together
2.0.22.12 Repair cabinets
2.0.22.13 Repair wall and base cabinets
2.0.22.14 Repair countertops
2.0.22.15 Install shelves
2.0.22.16 Replace recessed medicine cabinets
2.0.22.17 Install closet accessories

* Advancing
** Futuring

Competency 2.0.23: Replace windows and doors according to project specifications

Competency Builders:

2.0.23.1 Determine size and type of unit
2.0.23.2 Remove existing unit
2.0.23.3 Adjust rough opening
2.0.23.4 Position and attach unit
2.0.23.5 Insulate and seal around unit
2.0.23.6 Cut, position, and attach steps

Competency 2.0.24: Install or replace storm windows and doors according to project specifications

Competency Builders:

2.0.24.1 Select unit
2.0.24.2 Position and attach storm windows
2.0.24.3 Position and attach door units

Competency 2.0.25: Install garage doors and power units according to manufacturer's specifications

Competency Builders:

2.0.25.1 Select garage door unit
2.0.25.2 Construct garage door frame
2.0.25.3 Position and attach garage door unit
2.0.25.4 Install garage door power unit

Competency 2.0.26: Install porches and decks*

Competency Builders:

2.0.26.1 Determine job requirements*
2.0.26.2 Lay out deck perimeter according to job specifications*
2.0.26.3 Set posts*
2.0.26.4 Plumb and brace posts*
2.0.26.5 Tamp in and/or cement posts*
2.0.26.6 Cut, position, and attach frame materials*
2.0.26.7 Cut, position, and attach deck materials*
2.0.26.8 Cut, position, and attach railing*
2.0.26.9 Replace boards on balconies, decks, porches, and stops*

Competency 2.0.27: Install shutters

Competency Builders:

2.0.27.1 Position and attach exterior decorative shutters
2.0.27.2 Position and attach interior shutters

* Advancing
** Futuring

Competency 2.0.28: Frame wood and metal wall partitions according to project specifications

Competency Builders:

2.0.28.1 Determine job requirements
2.0.28.2 Lay out, cut, and install plate and header or metal track
2.0.28.3 Lay out, cut, and install studs

Unit 3: Roofing Applications and Repairs

Competency 3.0.1: Install dripedge and flashing

Competency Builders:

3.0.1.1 Determine job requirements
3.0.1.2 Assemble materials for dripedge and flashing
3.0.1.3 Install dripedge
3.0.1.4 Bend dripedge to fit pitch of roof
3.0.1.5 Install flashing

Competency 3.0.2: Install and/or replace shingles and caps according to manufacturer's specifications and building plans

Competency Builders:

3.0.2.1 Select materials
3.0.2.2 Determine installation method
3.0.2.3 Determine scaffolding and/or roof jack requirements
3.0.2.4 Erect scaffolding according to Occupational Safety and Health Administration (OSHA) standards
3.0.2.5 Install valleys
3.0.2.6 Install starter strip
3.0.2.7 Install first course of shingles
3.0.2.8 Install roof jacks
3.0.2.9 Install succeeding courses of shingles
3.0.2.10 Install hip and ridge caps
3.0.2.11 Repair leaks and damaged areas
3.0.2.12 Replace damaged shingles
3.0.2.13 Reroof over existing shingles

Competency 3.0.3: Install and repair roll roofing according to manufacturer's specifications and building plans

Competency Builders:

3.0.3.1 Select materials
3.0.3.2 Determine installation method
3.0.3.3 Determine scaffolding and/or roof jack requirements
3.0.3.4 Erect scaffolding according to OSHA standards
3.0.3.5 Install felt paper and valleys
3.0.3.6 Strike line for first strip
3.0.3.7 Install starter strip

(continued)

(continued)

3.0.3.8 Install roof jacks according to OSHA standards
3.0.3.9 Install succeeding strips
3.0.3.10 Install ridge cap
3.0.3.11 Repair rolled roofing

Competency 3.0.4: Install or replace wood shingles according to manufacturer's specifications and building plans

Competency Builders:

3.0.4.1 Select materials
3.0.4.2 Determine installation method
3.0.4.3 Determine scaffolding and/or roof jack requirements
3.0.4.4 Erect scaffolding according to OSHA standards
3.0.4.5 Install underlay
3.0.4.6 Install valleys
3.0.4.7 Install starter course
3.0.4.8 Install doubler course
3.0.4.9 Strike chalk line or attach temporary straightedge
3.0.4.10 Install shingles
3.0.4.11 Install shingles around flashing and vents
3.0.4.12 Install ridge cap shingles
3.0.4.13 Repair leaks and damaged areas
3.0.4.14 Replace damaged shingles

Unit 4: Ceramic Tile

Competency 4.0.1: Maintain ceramic tile surfaces

Competency Builders:

4.0.1.1 Prepare and clean surface
4.0.1.2 Reset loose tile
4.0.1.3 Regrout tile
4.0.1.4 Reseal surface

Competency 4.0.2: Replace section of tile surfaces

Competency Builders:

4.0.2.1 Remove damaged section(s)
4.0.2.2 Make necessary substructure repairs
4.0.2.3 Prepare and clean substructure
4.0.2.4 Install replacement tile
4.0.2.5 Grout tile
4.0.2.6 Seal tile

Unit 5: Masonry Applications and Repairs

Competency 5.0.1: Demonstrate use of basic masonry tools

Competency Builders:

5.0.1.1 Identify masonry tools
5.0.1.2 Use and maintain masonry tools

Competency 5.0.2: Prepare mortar according to project requirements

Competency Builders:

5.0.2.1 Mix mortar manually
5.0.2.2 Mix mortar mechanically
5.0.2.3 Place mortar on boards

Competency 5.0.3: Establish work area

Competency Builders:

5.0.3.1 Identify materials and location
5.0.3.2 Clean and level work area

Competency 5.0.4: Stock wall for repair according to project specifications

Competency Builders:

5.0.4.1 Identify materials needed for each job
5.0.4.2 Place materials for each job
5.0.4.3 Prepare mortarboards and stands

Competency 5.0.5: Identify bond pattern

Competency Builders:

5.0.5.1 Identify various bond patterns
5.0.5.2 Re-lay wall in specific bond pattern

Competency 5.0.6: Manage files*

Competency Builders:

5.0.6.1 Maintain records*
5.0.6.2 Maintain warranty contracts*

Competency 5.0.7: Estimate needed materials and cost*

Competency Builders:

5.0.7.1 Calculate square feet*
5.0.7.2 Calculate number of bricks in a wall of given dimensions*
5.0.7.3 Calculate number of blocks in a wall of given dimensions*

* Advancing
** Futuring

Competency 5.0.8: Repair rowlock windowsill according to project specifications

Competency Builders:

5.0.8.1 Cut brick to size
5.0.8.2 Maintain degree of slope
5.0.8.3 Maintain level
5.0.8.4 Tool joints to match existing joints

Competency 5.0.9: Repair jamb according to project specifications

Competency Builders:

5.0.9.1 Maintain correct dimensions
5.0.9.2 Lay out stretcher
5.0.9.3 Lay jamb units to predetermined height
5.0.9.4 Maintain bond
5.0.9.5 Maintain level and plumb
5.0.9.6 Tool joints to match existing joints

Competency 5.0.10: Install or replace lintels according to project specifications

Competency Builders:

5.0.10.1 Identify types of lintels
5.0.10.2 Position lintels
5.0.10.3 Set lintels

Competency 5.0.11: Set window frame according to project specifications

Competency Builders:

5.0.11.1 Use level
5.0.11.2 Clean sash slots
5.0.11.3 Install window
5.0.11.4 Install lintel and crossover

Competency 5.0.12: Set door frame according to project specifications

Competency Builders:

5.0.12.1 Use level
5.0.12.2 Interpret blueprints
5.0.12.3 Install lintel and crossover
5.0.12.4 Install door frame and anchors

Competency 5.0.13: Build block wall

Competency Builders:

5.0.13.1 Follow drawing specifications
5.0.13.2 Lay block
5.0.13.3 Install reinforcing
5.0.13.4 Parge and waterproof wall

Competency 5.0.14: Tuck-point masonry wall consistent with existing structure

Competency Builders:

5.0.14.1 Determined source of problem
5.0.14.2 Use tucking tools
5.0.14.3 Use joint tools
5.0.14.4 Remove mortar and clean joints
5.0.14.5 Point and finish joints

Competency 5.0.15: Lay glass blocks*

Competency Builders:

5.0.15.1 Measure opening*
5.0.15.2 Chase bond*
5.0.15.3 Install spacers*
5.0.15.4 Set block*
5.0.15.5 Use grout bag or tuck joints*

Competency 5.0.16: Install flashing*

Competency Builders:

5.0.16.1 Measure metal*
5.0.16.2 Cut metal*
5.0.16.3 Bend metal*
5.0.16.4 Attach metal*
5.0.16.5 Caulk and seal metal*

Unit 6: Electrical Installations and Repairs

Competency 6.0.1: Demonstrate knowledge of National Electric Code (NEC)

Competency Builders:

6.0.1.1 Obtain required information from NEC
6.0.1.2 Use NEC to determine correct materials
6.0.1.3 Use NEC to determine correct methods
6.0.1.4 Use NEC to determine correct applications
6.0.1.5 Use NEC to determine correct safety procedures

Competency 6.0.2: Read and interpret drawings and specifications

Competency Builders:

6.0.2.1 Notify utility company as needed
6.0.2.2 Identify lines and symbols
6.0.2.3 Interpret and comply with local codes
6.0.2.4 Identify contractor's responsibilities
6.0.2.5 Develop list of needed materials

* Advancing
** Futuring

Competency 6.0.3: Plan and lay out job

Competency Builders:

6.0.3.1 Visit work site
6.0.3.2 Draw sketch
6.0.3.3 Calculate individual circuit loads
6.0.3.4 Determine number of outlets per circuit
6.0.3.5 Determine special outlet requirements

Competency 6.0.4: Estimate materials*

Competency Builders:

6.0.4.1 Identify materials for given job*
6.0.4.2 Calculate quantities of materials needed*
6.0.4.3 Obtain catalog and price lists*
6.0.4.4 Compute cost estimate for materials*

Competency 6.0.5: Install and rough-in wiring according to NEC and local codes

Competency Builders:

6.0.5.1 Install wiring
6.0.5.2 Install wire in boxes
6.0.5.3 Install ground
6.0.5.4 Make splices
6.0.5.5 Install light circuits for single-pole switches
6.0.5.6 Install light circuits with three-way switches
6.0.5.7 Install light circuits with four-way switches

Competency 6.0.6: Finish wiring according to NEC and local codes

Competency Builders:

6.0.6.1 Install fixtures
6.0.6.2 Install devices and covers to include ground fault interrupt (GFI) receptacles and breakers
6.0.6.3 Check and test installation
6.0.6.4 Connect appliances

Competency 6.0.7: Use test equipment according to manufacturer's directions

Competency Builders:

6.0.7.1 Measure with digital volt ohm multimeter (DVOM)
6.0.7.2 Measure with analog volt ohm multimeter (AVOM)
6.0.7.3 Measure with voltage tester
6.0.7.4 Use outlet tester
6.0.7.5 Use ampere meter

Competency 6.0.8: Maintain electrical systems according to building blueprint specifications, NEC, and local codes

Competency Builders:

6.0.8.1 Troubleshoot and diagnose failure*
6.0.8.2 Repair incandescent and fluorescent light fixtures
6.0.8.3 Repair relays and timer
6.0.8.4 Replace faulty wiring
6.0.8.5 Replace fuses
6.0.8.6 Repair battery backup emergency lighting systems
6.0.8.7 Repair generator backup emergency lighting systems*
6.0.8.8 Reset breakers
6.0.8.9 Test circuits and GFI devices
6.0.8.10 Replace circuit breakers to include GFI breakers
6.0.8.11 Replace basic electrical components
6.0.8.12 Maintain power systems*
6.0.8.13 Install lighting control devices
6.0.8.14 Repair high-pressure sodium lighting*

Competency 6.0.9: Analyze blueprints to identify circuit function*

Competency Builders;

6.0.9.1 Recognize electrical symbols*
6.0.9.2 Interpret blueprints and wiring programs*

Competency 6.0.10: Trace circuits to locate problem*

Competency Builders:

6.0.10.1 Identify circuit type or subsystem*
6.0.10.2 Locate specific circuits according to diagram*
6.0.10.3 Utilize proper troubleshooting technique*
6.0.10.4 Replace faulty component*

Competency 6.0.11: Install security and energy-management systems*

Competency Builders:

6.0.11.1 Comply with local and state codes*
6.0.11.2 Lay out system*
6.0.11.3 Install and verify system*

Competency 6.0.12: Service security and energy-management systems*

Competency Builders:

6.0.12.1 Check system operation*
6.0.12.2 Troubleshoot malfunction*
6.0.12.3 Maintain functioning system*
6.0.12.4 Replace faulty components*

Competency 6.0.13: Analyze schematics to identify circuit function*

Competency Builders:

6.0.13.1 Recognize electrical symbols*
6.0.13.2 Interpret schematic reading and wiring programs*

Competency 6.0.14: Trace circuits to locate problems*

Competency Builders:

6.0.14.1 Identify circuit type or subsystem*
6.0.14.2 Locate specific circuits according to diagram*
6.0.14.3 Utilize proper troubleshooting technique*

Competency 6.0.15: Use soldering tools according to manufacturer's directions

Competency Builders:

6.0.15.1 Wear approved eye protection
6.0.15.2 Select appropriate soldering tools and supplies
6.0.15.3 Perform soldering and desoldering techniques

Competency 6.0.16: Install energy-management system**

Competency Builders:

6.0.16.1 Install and verify system**
6.0.16.2 Analyze power factor correction equipment**

Competency 6.0.17: Maintain appliances according to manufacturer's specifications

Competency Builders:

6.0.17.1 Repair electric ranges and ovens
6.0.17.2 Repair washers and dryers
6.0.17.3 Repair dishwashers
6.0.17.4 Repair refrigerators
6.0.17.5 Repair or replace disposer units

Unit 7: Plumbing Installations and Repairs

Competency 7.0.1: Prepare and install piping systems according to manufacturer's specifications and local codes

Competency Builders:

7.0.1.1 Interpret drawings
7.0.1.2 Measure and cut copper pipe
7.0.1.3 Ream copper pipe
7.0.1.4 Prefit copper pipe with connectors
7.0.1.5 Sweat copper pipe
7.0.1.6 Measure, cut, and fit polyvinyl chloride (PVC) pipe

(continued)

(continued)

7.0.1.7 Measure and cut steel pipe
7.0.1.8 Ream and thread steel pipe
7.0.1.9 Install polybutylene pipe and fittings

Competency 7.0.2: Install plumbing fixtures according to manufacturer's specifications and local codes

Competency Builders:

7.0.2.1 Interpret drawings
7.0.2.2 Install water closets
7.0.2.3 Install sinks
7.0.2.4 Install faucet assemblies
7.0.2.5 Install and maintain tubs and shower enclosures
7.0.2.6 Connect and maintain drains and traps
7.0.2.7 Install water pumps
7.0.2.8 Install electric and gas hot-water heaters
7.0.2.9 Perform leak tests
7.0.2.10 Insulate pipes
7.0.2.11 Perform back-flow test procedures
7.0.2.12 Install disposer units

Competency 7.0.3: Maintain plumbing installations according to manufacturer's specifications and local codes

Competency Builders:

7.0.3.1 Repair float valves
7.0.3.2 Open clogged drains
7.0.3.3 Repair copper pipe
7.0.3.4 Repair PVC pipe
7.0.3.5 Repair faucets and valves
7.0.3.6 Change water filters and screens
7.0.3.7 Regulate water levels, pressures, and temperatures
7.0.3.8 Service chlorinators
7.0.3.9 Repair water heaters
7.0.3.10 Maintain compressed-air systems
7.0.3.11 Maintain freeze traps
7.0.3.12 Maintain garage interceptors

Unit 8: Welding and Cutting Operations

Competency 8.0.1: Use arc welding equipment

Competency Builders:

8.0.1.1 Wear personal safety apparatus according to Occupational Safety and Health Administration (OSHA) standards
8.0.1.2 Weld with arc welding equipment
8.0.1.3 Cut with arc welding equipment

* Advancing
** Futuring

Competency 8.0.2: Use oxyacetylene welding equipment

Competency Builders:

8.0.2.1 Wear personal safety apparatus according to OSHA standards
8.0.2.2 Weld with oxyacetylene welding equipment
8.0.2.3 Cut with oxyacetylene welding equipment

Unit 9: Heating, Ventilation, Air-Conditioning, and Refrigeration Installations and Service

Competency 9.0.1: Repair refrigeration units according to applicable codes

Competency Builders:

9.0.1.1 Interpret operator's manual
9.0.1.2 Use gauges to check head and suction pressure
9.0.1.3 Troubleshoot refrigeration unit
9.0.1.4 Test for leaks
9.0.1.5 Replace compressor*
9.0.1.6 Install tube connections*
9.0.1.7 Install expansion valve*
9.0.1.8 Install temperature valve*
9.0.1.9 Install pressure valve*
9.0.1.10 Evacuate system*
9.0.1.11 Charge system*

Competency 9.0.2: Maintain heating, ventilation, and air-conditioning systems and components according to manufacturer's specifications

Competency Builders:

9.0.2.1 Interpret operator's manual
9.0.2.2 Perform preventive maintenance
9.0.2.3 Troubleshoot forced-air control systems
9.0.2.4 Troubleshoot gas system components
9.0.2.5 Change filters
9.0.2.6 Clean coils
9.0.2.7 Check fans
9.0.2.8 Analyze gauge and thermometer readings
9.0.2.9 Record gauge and thermometer readings
9.0.2.10 Make minor burner repairs
9.0.2.11 Check stack temperature
9.0.2.12 Calibrate electrical and mechanical temperature controllers*
9.0.2.13 Clean heat exchangers
9.0.2.14 Repair pumps
9.0.2.15 Lubricate moving system components

* Advancing
** Futuring

Competency 9.0.3: Replace heating, ventilation, and air-conditioning systems and components according to manufacturer's specifications and applicable codes

Competency Builders:

9.0.3.1 Remove and replace baseboard heat units
9.0.3.2 Reconnect related wiring and controls
9.0.3.3 Remove and replace wall heaters
9.0.3.4 Remove and replace exhaust/vent fans
9.0.3.5 Remove and replace window/sleeve air-conditioning units
9.0.3.6 Modify duct work to fit new installations
9.0.3.7 Replace pumps and motors

Unit 10: Painting and Wallpapering

Competency 10.0.1: Use and maintain painting equipment and tools

Competency Builders:

10.0.1.1 Use appropriate personal safety apparatus
10.0.1.2 Inspect equipment and tools
10.0.1.3 Use equipment and tools
10.0.1.4 Maintain equipment and tools
10.0.1.5 Inspect spraying equipment*
10.0.1.6 Use spraying equipment*
10.0.1.7 Maintain spraying equipment*

Competency 10.0.2: Prepare surfaces

Competency Builders:

10.0.2.1 Caulk surfaces
10.0.2.2 Tape seams
10.0.2.3 Spackle surfaces
10.0.2.4 Sand surfaces
10.0.2.5 Clean surfaces
10.0.2.6 Measure moisture content*
10.0.2.7 Seal surfaces
10.0.2.8 Prime surfaces

Competency 10.0.3: Set up for jobs

Competency Builders:

10.0.3.1 Select proper materials
10.0.3.2 Select proper equipment and tools
10.0.3.3 Perform safety inspection of ladders and scaffolding
10.0.3.4 Erect scaffolding and ladders according to Occupational Safety and Health Administration (OSHA) standards
10.0.3.5 Spread drop cloths
10.0.3.6 Apply masking liquids and tape

* Advancing
** Futuring

Competency 10.0.4: Mix paint according to manufacturer's specifications

Competency Builders:

10.0.4.1 Interpret charts
10.0.4.2 Match colors
10.0.4.3 Mix colors to obtain desired shades
10.0.4.4 Perform color styling through color selection
10.0.4.5 Stir and mix paint
10.0.4.6 Thin paints
10.0.4.7 Strain paints

Competency 10.0.5: Apply paint according to manufacturer's specifications

Competency Builders:

10.0.5.1 Paint interior surfaces
10.0.5.2 Paint acoustical surfaces
10.0.5.3 Paint exterior surfaces
10.0.5.4 Apply first coat
10.0.5.5 Apply second coat as necessary
10.0.5.6 Apply varnish
10.0.5.7 Paint over stain
10.0.5.8 Use roller applicators
10.0.5.9 Use brush applicators
10.0.5.10 Paint surfaces with air spray gun*
10.0.5.11 Paint surfaces with airless spray gun*

Competency 10.0.6: Apply wood finishes according to manufacturer's specifications

Competency Builders:

10.0.6.1 Identify open- and closed-grain woods
10.0.6.2 Bleach and stain wood
10.0.6.3 Apply and finish wood filler
10.0.6.4 Apply sealer/shellac, varnish, and lacquer
10.0.6.5 Rub and polish sealer/shellac, varnish, and lacquer finishes
10.0.6.6 Identify finish defects
10.0.6.7 Finish hardwood and softwood floors
10.0.6.8 Repair finishes
10.0.6.9 Apply waxes

Competency 10.0.7: Apply brick, cement, and stucco finishes*

Competency Builders:

10.0.7.1 Prepare brick for paint*
10.0.7.2 Mix paint and apply to brick*
10.0.7.3 Prepare cement or stucco for paint*
10.0.7.4 Mix paint and apply to cement or stucco*
10.0.7.5 Prepare and paint cement floors*

Competency 10.0.8: Apply metal finishes according to manufacturer's specifications

Competency Builders:

10.0.8.1 Prepare metal surface for painting
10.0.8.2 Mix paint and apply to metal surface
10.0.8.3 Mix and apply aluminum paint
10.0.8.4 Paint downspouts, gutters, and flashing
10.0.8.5 Apply paint electrostatically to metal surfaces*

Competency 10.0.9: Apply special finishes according to manufacturer's specifications

Competency Builders:

10.0.9.1 Apply antique finishes
10.0.9.2 Apply stipple finishes
10.0.9.3 Apply spatter finishes
10.0.9.4 Apply texture paint
10.0.9.5 Use stencils
10.0.9.6 Use graining technique

Competency 10.0.10: Estimate jobs*

Competency Builders:

10.0.10.1 Estimate costs from blueprints, site requirements, and price lists*
10.0.10.2 Perform inventory control and resupply*

Competency 10.0.11: Hang wallcovering according to manufacturer's specifications

Competency Builders:

10.0.11.1 Select wallcovering materials
10.0.11.2 Select wallcovering tools
10.0.11.3 Use wallcovering tools
10.0.11.4 Maintain wallcovering tools
10.0.11.5 Prepare new drywall surfaces for wallcovering
10.0.11.6 Prepare new plaster surfaces for wallcovering
10.0.11.7 Prepare previously papered surfaces for wallcovering
10.0.11.8 Measure and trim wallcovering
10.0.11.9 Apply paste to trimmed sections of wallcovering
10.0.11.10 Hang wallcovering on vertical surface
10.0.11.11 Hang and trim wallcovering around doors and windows
10.0.11.12 Hang and trim wallcovering around inside corners
10.0.11.13 Hang and trim wallcovering around outside corners
10.0.11.14 Hang and trim wallcovering inside and around arches
10.0.11.15 Hang and trim wallcovering on ceilings
10.0.11.16 Hang murals
10.0.11.17 Hang borders
10.0.11.18 Cover switch and outlet plates
10.0.11.19 Repair tears in wallcovering

Unit 11: Employability Skills
Subunit 11.1: Career Development

Competency 11.1.1: Investigate career options

Competency Builders:

11.1.1.1 Determine interests and aptitudes
11.1.1.2 Identify career options
11.1.1.3 Research occupations matching interests and aptitudes
11.1.1.4 Select career(s) that best match(es) interests and aptitudes
11.1.1.5 Identify advantages and disadvantages of career options, including nontraditional careers
11.1.1.6 Assess differences in wages, annual incomes, and job opportunities based on geographic location
11.1.1.7 Develop a career plan

Competency 11.1.2: Analyze potential barriers to employment

Competency Builders:

11.1.2.1 Identify common barriers to employment
11.1.2.2 Describe strategies to overcome employment barriers

Unit 11: Employability Skills
Subunit 11.2: Decision Making and Problem Solving

Competency 11.2.1: Apply decision-making techniques in the workplace

Competency Builders:

11.2.1.1 Identify the decision to be made
11.2.1.2 Compare alternatives
11.2.1.3 Determine consequences of each alternative
11.2.1.4 Make decisions based on values and goals
11.2.1.5 Evaluate the decision made

Competency 11.2.2: Apply problem-solving techniques in the workplace

Competency Builders:

11.2.2.1 Diagnose the problem and its causes
11.2.2.2 Identify alternatives and their consequences in relation to the problem
11.2.2.3 Examine multicultural and nonsexist dimensions of problem solving
11.2.2.4 Utilize resources to explore possible solutions to the problem
11.2.2.5 Compare and contrast the advantages and disadvantages of each solution
11.2.2.6 Determine appropriate action
11.2.2.7 Evaluate results

Unit 11: Employability Skills
Subunit 11.3: Work Ethic

Competency 11.3.1: Evaluate the relationship of self-esteem to work ethic

Competency Builders:

11.3.1.1 Identify special characteristics and abilities in self and others
11.3.1.2 Identify internal and external factors that affect self-esteem

Competency 11.3.2: Analyze the relationship of personal values and goals to work ethic both in and out of the workplace

Competency Builders:

11.3.2.1 Distinguish between values and goals
11.3.2.2 Determine the importance of values and goals
11.3.2.3 Evaluate how values affect goals
11.3.2.4 Identify short-term and long-term goals
11.3.2.5 Prioritize personal goals
11.3.2.6 Describe how personal values are reflected in work ethic
11.3.2.7 Describe how interactions in the workplace affect personal work ethic
11.3.2.8 Examine how life changes affect personal work ethic

Competency 11.3.3: Demonstrate work ethic

Competency Builders:

11.3.3.1 Examine factors that influence work ethic
11.3.3.2 Exhibit characteristics that reflect an appropriate work ethic

Unit 11: Employability Skills
Subunit 11.4: Job-Seeking Skills

Competency 11.4.1: Prepare for employment

Competency Builders:

11.4.1.1 Identify traditional and nontraditional employment sources
11.4.1.2 Utilize employment sources
11.4.1.3 Research job opportunities, including nontraditional careers
11.4.1.4 Interpret equal employment opportunity laws
11.4.1.5 Explain the critical importance of personal appearance, hygiene, and demeanor throughout the employment process
11.4.1.6 Prepare for generic employment tests and those specific to an occupation/organization

* Advancing
** Futuring

BEST COPY AVAILABLE

Competency 11.4.2: Design a résumé

Competency Builders:

11.4.2.1 Identify personal strengths and weaknesses
11.4.2.2 List skills and/or abilities, career objective(s), accomplishments/achievements, educational background, and work experience
11.4.2.3 Demonstrate legible written communication skills using correct grammar, spelling, and concise wording
11.4.2.4 Complete résumé using various formats
11.4.2.5 Secure references

Competency 11.4.3: Complete and process job application forms

Competency Builders:

11.4.3.1 Explain the importance of an application form
11.4.3.2 Identify ways to obtain job application forms
11.4.3.3 Describe methods for handling illegal questions on job application forms
11.4.3.4 Demonstrate legible written communication skills using correct grammar, spelling, and concise wording
11.4.3.5 Return application to proper person, request interview, and follow up

Competency 11.4.4: Demonstrate interviewing skills

Competency Builders:

11.4.4.1 Investigate interview environment and procedures
11.4.4.2 Explain the critical importance of personal appearance, hygiene, and demeanor
11.4.4.3 Demonstrate question and answer techniques
11.4.4.4 Demonstrate methods for handling difficult and/or illegal interview questions

Competency 11.4.5: Secure employment

Competency Builders:

11.4.5.1 Identify present and future employment opportunities within an occupation/organization
11.4.5.2 Research the organization/company
11.4.5.3 Use follow-up techniques to enhance employment potential
11.4.5.4 Compare and evaluate job offers

Unit 11: Employability Skills
Subunit 11.5: Job Retention Skills

Competency 11.5.1: Analyze the organizational structure of the workplace

Competency Builders:

11.5.1.1 Identify and evaluate employer expectations regarding job performance, work habits, attitudes, personal appearance, and hygiene
11.5.1.2 Be aware of and obey all company policies and procedures
11.5.1.3 Examine the role/relationship between employee and employer
11.5.1.4 Recognize opportunities for advancement and reasons for termination

* Advancing
** Futuring

Competency 11.5.2: Maintain positive relations with others

Competency Builders:

11.5.2.1 Exhibit appropriate work habits and attitude
11.5.2.2 Identify behaviors to establish successful working relationships
11.5.2.3 Cooperate and compromise through teamwork and group participation
11.5.2.4 Identify alternatives for dealing with harassment, bias, and discrimination based on race, color, national origin, sex, religion, handicap, or age

Unit 11: Employability Skills
Subunit 11.6: Job Advancement

Competency 11.6.1: Analyze opportunities for personal and career growth

Competency Builders:

11.6.1.1 Determine opportunities within an occupation/organization
11.6.1.2 Compare and contrast other opportunities
11.6.1.3 List benefits of job advancement
11.6.1.4 Evaluate factors involved when assuming a new position within or outside an occupation/organization

Competency 11.6.2: Exhibit characteristics needed for advancement

Competency Builders:

11.6.2.1 Display a positive attitude
11.6.2.2 Demonstrate knowledge of a position
11.6.2.3 Perform quality work
11.6.2.4 Adapt to changing situations and technology
11.6.2.5 Demonstrate capability for different positions
11.6.2.6 Participate in continuing education/training programs
11.6.2.7 Respect, accept, and work with ALL individuals in the workplace

Unit 11: Employability Skills
Subunit 11.7: Technology in the Workplace

Competency 11.7.1: Assess the impact of technology in the workplace

Competency Builders:

11.7.1.1 Cite how past business/industry practices have influenced present business/industry processes
11.7.1.2 Investigate the use of technology in the workplace
11.7.1.3 Analyze how present skills can be applied to learning new technologies

Competency 11.7.2: Use a variety of technological applications

Competency Builders:

11.7.2.1 Explore basic mathematical, scientific, computer, and technological principles
11.7.2.2 Use technology to accomplish assigned tasks
11.7.2.3 Create solutions to problems using technical means

* Advancing
** Futuring

Unit 11: Employability Skills
Subunit 11.8: Lifelong Learning

Competency 11.8.1: Apply lifelong learning to individual situations

Competency Builders:

11.8.1.1 Define lifelong learning
11.8.1.2 Identify factors that cause the need for lifelong learning

Competency 11.8.2: Adapt to change

Competency Builders:

11.8.2.1 Analyze the effects of change
11.8.2.2 Identify reasons why goals change
11.8.2.3 Describe the importance of flexibility when reevaluating goals
11.8.2.4 Evaluate the need for continuing education/training

Unit 11: Employability Skills
Subunit 11.9: Economic Education

Competency 11.9.1: Analyze global enterprise system

Competency Builders:

11.9.1.1 Identify characteristics of various enterprise systems
11.9.1.2 Examine the relationship between competition, risk, and profit
11.9.1.3 Illustrate how supply and demand influence price

Competency 11.9.2: Evaluate personal money management

Competency Builders:

11.9.2.1 Describe the need for personal management records
11.9.2.2 Identify methods of taxation
11.9.2.3 Analyze how credit affects financial security
11.9.2.4 Compare types and methods of investments
11.9.2.5 Prepare a personal budget
11.9.2.6 Be an informed and responsible consumer
11.9.2.7 Analyze the effects of advertising on the consumer

* Advancing
** Futuring

Unit 11: Employability Skills
Subunit 11.10: Balancing Work and Family

Competency 11.10.1: Analyze the effects of family on work

Competency Builders:

11.10.1.1 Recognize how family values, goals, and priorities are reflected in the workplace
11.10.1.2 Identify present and future family structures and responsibilities
11.10.1.3 Describe personal and family roles
11.10.1.4 Analyze concerns of working parent(s)
11.10.1.5 Examine how family responsibilities can conflict with work
11.10.1.6 Resolve family-related conflicts
11.10.1.7 Explain how to use support systems/community resources to help resolve family-related conflicts

Competency 11.10.2: Analyze the effects of work on family

Competency Builders:

11.10.2.1 Identify responsibilities associated with paid and nonpaid work
11.10.2.2 Compare the advantages and disadvantages of multiple incomes
11.10.2.3 Explain how work can conflict with family responsibilities
11.10.2.4 Explain how work-related stress can affect families
11.10.2.5 Identify family support systems and resources

Unit 11: Employability Skills
Subunit 11.11: Citizenship in the Workplace

Competency 11.11.1: Exercise the rights and responsibilities of citizenship in the workplace

Competency Builders:

11.11.1.1 Identify the basic rights and responsibilities of citizenship
11.11.1.2 Examine the history and contributions of all racial, ethnic, and cultural groups

Competency 11.11.2: Cooperate with others in the workplace

Competency Builders:

11.11.2.1 Identify situations in which compromise is necessary
11.11.2.2 Examine how individuals from various backgrounds contribute to work-related situations
11.11.2.3 Demonstrate initiative to facilitate cooperation
11.11.2.4 Give and receive constructive criticism to enhance cooperation

* Advancing
** Futuring

Unit 11: Employability Skills
Subunit 11.12: Leadership

Competency 11.12.1: Evaluate leadership styles appropriate for the workplace

Competency Builders:

11.12.1.1 Identify characteristics of effective leaders
11.12.1.2 Compare leadership styles
11.12.1.3 Demonstrate effective delegation skills
11.12.1.4 Identify opportunities to lead in the workplace

Competency 11.12.2: Demonstrate effective teamwork skills

Competency Builders:

11.12.2.1 Identify the responsibilities of a valuable group member
11.12.2.2 Exhibit open-mindedness
11.12.2.3 Identify methods of involving each member of a team
11.12.2.4 Contribute to the efficiency and success of a group
11.12.2.5 Determine ways to motivate others

Competency 11.12.3: Utilize effective communication skills

Competency Builders:

11.12.3.1 Identify the importance of listening
11.12.3.2 Demonstrate assertive communication
11.12.3.3 Recognize the importance of verbal and nonverbal cues and messages
11.12.3.4 Analyze written material
11.12.3.5 Prepare written material
11.12.3.6 Give and receive feedback
11.12.3.7 Articulate thoughts
11.12.3.8 Use appropriate language

Unit 11: Employability Skills
Subunit 11.13: Entrepreneurship

Competency 11.13.1: Evaluate the role of small business in the economy

Competency Builders:

11.13.1.1 Identify the benefits of small business to a community
11.13.1.2 Analyze opportunities for small business in a community

Competency 11.13.2: Examine considerations of starting a business

Competency Builders:

11.13.2.1 Research a business idea
11.13.2.2 Compare various ways to become a small business owner
11.13.2.3 Investigate factors to consider in financing a new business
11.13.2.4 Evaluate entrepreneurship as a career option

* Advancing
** Futuring

Distributed by

Vocational Instructional Materials Laboratory
The Ohio State University
1900 Kenny Road
Columbus, Ohio 43210-1090